Amendments to the Specification

Please amend the Title as follows:

-- DIE CARRIER WITH FLUID CHAMBER --

Please replace page 3, para [16] with the following:

[16] In an exemplary embodiment, a MEMS structure is fabricated on a surface 39 (FIG. 2) of the substrate die 31. The MEMS device may be fabricated on the surface by techniques such as, for example, deposition, photolithography and etching processes and removal of sacrificial support structures. Movable features may be produced on the surface of the substrate, die or wafer. In the exemplary embodiments illustrated in FIGS 1 and 2, a MEMS structure 35 is on the upper surface 39 of the substrate die 31. The MEMS structure may be a fluidic MEMS structure such as a mirror array, a lab-on-chip, an optical switch or other fluidic MEMS application. A [[A]]lab-on-chip[[@]] may integrate fluid handling, chemical sensors and/or electronics to perform analytical processes. In the alternative, the MEMS structure may be a non-fluidic MEMS structure. In an exemplary embodiment, for instance in the case of a mirror array, the cover plate 32 may be a optical window or aperture. The cover plate may comprise plastic, metal or metal alloys such as Kovar (TM), ceramic or glass.

Please replace page 9, paragraph [31] with the following:

[31] In an exemplary embodiment, the fill port and evacuate port may be sealed after filling the fluid chamber and/or inner cavity with fluid so that no fluid is added to the system and no fluid is removed from the system after sealing. In other exemplary embodiments, a fluid flow may be provided from outside the system, into the system and through the fluid chamber and/or the inner cavity and then back out from the system. The fluid flow may improve heat transfer away from the MEMS device. FIG. 6 illustrates an exemplary embodiment with a fluid pump 5 arranged to provide pressurized fluid to a fluid source at the fill port 21. The fluid passes through a fluid chamber and/or an inner cavity and out the evacuate port 22. The fluid may be recirculated or may pass through once, for example,

where a [[A]]lab-on-chip[[@]] continuously monitors a stream of fluid for process control or contamination, for example. In embodiments with flow through the MEMS device, check valves may be arranged to allow fluid flow in through the fill port and out through the evacuate port. A controller 55 may control the pump to maintain desired pressure and fluid flow. The pump may draw fluid 56 from a fluid reservoir 561 and fluid evacuated through the evacuate port 22 may be returned to the reservoir 561.